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C-A OPERATIONS PROCEDURES MANUAL

4.120.82.i Tandem Rollup Tests

Attachment

C-A-OPM Procedures in which this Attachment is used.		
4.120.82		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
_____	_____	_____	_____

Approved: _____ *Signature on File* _____
 Collider-Accelerator Department Chairman Date

V. Castillo

4.120.82.i Tandem Rollup Tests

PASS SEMI-ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: _____ Checksum: _____

Division B Software Filename and Checksum: Title: _____ Checksum: _____

Initial testing complete:

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Test results reviewed by:

Safety Section Head's Name (Print): _____ Life Number: _____

Safety Section Head's Name (Sign): _____ Date: ____/____/____

Test results accepted by Radiation Safety Committee:

RSC Member's Name (Print): _____ Life Number: _____

RSC Member's Name (Sign): _____ Date: ____/____/____

1.1 Rollup Test on MP6

	RESET	All Tandem gates	
<input type="checkbox"/>	VERIFY	Tandem Control Room (TCR) sees all gates, Div A <input type="checkbox"/> , Div B <input type="checkbox"/>	SECURED
<input type="checkbox"/>	VERIFY	TCR sees Chipmunk 1, Div A <input type="checkbox"/> and Div B	O.K.
<input type="checkbox"/>	VERIFY	TCR sees Chipmunk 2, Div A <input type="checkbox"/> and Div B	O.K.
	SET	Power Supply C below Setpoint	
<input type="checkbox"/>	VERIFY	TCR sees Div A RIS unit	O.K.
	SET	Power Supply E below Setpoint	
<input type="checkbox"/>	VERIFY	TCR sees Div B RIS unit	O.K.
	INSERT	12MW040	
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B <input type="checkbox"/> 12MW040	INSERTED
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	O.K.
	SATISFY	MP6 Existing interlocks	
<input type="checkbox"/>	VERIFY	TCR sees MP6 existing interlocks Div A <input type="checkbox"/> and Div B	O.K.
	SATISFY	MP7 Existing interlocks	
<input type="checkbox"/>	VERIFY	TCR sees MP7 existing interlocks Div A <input type="checkbox"/> and Div B	O.K.
	EXTRACT	MP6 beamstop	
<input type="checkbox"/>	VERIFY	TCR sees MP6 beamstop	EXTRACTED
	OPEN	TTB gate	
<input type="checkbox"/>	VERIFY	TCR sees TTB gate	OPEN
<input type="checkbox"/>	VERIFY	TCR sees all gates, Div A <input type="checkbox"/> , Div B <input type="checkbox"/>	NOT SECURED
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	NOT O.K.
<input type="checkbox"/>	VERIFY	TCR sees MP6 beamstop	INSERTED
	RESET	TTB gate	
<input type="checkbox"/>	VERIFY	TCR sees TTB gate	RESET
<input type="checkbox"/>	VERIFY	TCR sees all gates, Div A <input type="checkbox"/> , Div B <input type="checkbox"/>	SECURED
	EXTRACT	MP6 beamstop	
<input type="checkbox"/>	VERIFY	TCR sees MP6 beamstop	EXTRACTED
	TRIP	Chipmunk 1	
<input type="checkbox"/>	VERIFY	TCR sees Chipmunk 1, Div A <input type="checkbox"/> and Div B	NOT O.K.
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	NOT O.K.
<input type="checkbox"/>	VERIFY	TCR sees MP6 beamstop	INSERTED
	RESET	Chipmunk 1	
<input type="checkbox"/>	VERIFY	TCR sees Chipmunk 1, Div A <input type="checkbox"/> and Div B	O.K.
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	O.K.
	EXTRACT	MP6 beamstop	
<input type="checkbox"/>	VERIFY	TCR sees MP6 beamstop	EXTRACTED

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|--------------------------|---|--|------------------|
| | SET | Power Supply C above Setpoint | |
| <input type="checkbox"/> | VERIFY | TCR sees Div A RIS unit | NOT O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B interlocks | NOT O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees MP6 beamstop | INSERTED |
| | SET | Power Supply C below Setpoint | |
| <input type="checkbox"/> | VERIFY | TCR sees Div A RIS unit | O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B interlocks | O.K. |
| | EXTRACT | MP6 beamstop | |
| <input type="checkbox"/> | VERIFY | TCR sees MP6 beamstop | EXTRACTED |
| | EXTRACT | 12MW040 | |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B <input type="checkbox"/> 12MW040 | EXTRACTED |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B interlocks | NOT O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees MP6 beamstop | INSERTED |
| | INSERT | 12MW040 | |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B <input type="checkbox"/> 12MW040 | INSERTED |
| | EXTRACT | MP6 beamstop | |
| <input type="checkbox"/> | VERIFY | TCR sees MP6 beamstop | EXTRACTED |
| | VIOLATE | MP6 existing interlocks | |
| <input type="checkbox"/> | VERIFY | TCR sees MP6 existing interlocks , Div A <input type="checkbox"/> and Div B <input type="checkbox"/> | NOT O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B interlocks | NOT O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees MP6 beamstop | INSERTED |
| | SATISFY | MP6 Existing interlocks | |
| <input type="checkbox"/> | VERIFY | TCR sees MP6 existing interlocks Div A <input type="checkbox"/> and Div B | O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B interlocks | O.K. |
| <input type="checkbox"/> | Check for acceptance of Rollup test of MP6 | | |

1.2 Rollup Test on MP7

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| | INSERT | Beam Plugs (BP) in Target Room 2 (TR2) | |
| <input type="checkbox"/> | VERIFY | TCR sees TR2 BPs, Div A <input type="checkbox"/> and Div B | INSERTED |
| | RESET | All Tandem gates | |
| <input type="checkbox"/> | VERIFY | TCR sees all gates, Div A <input type="checkbox"/> , Div B <input type="checkbox"/> | SECURED |
| | OPEN | TR2 Shield Door and leave open | |
| <input type="checkbox"/> | VERIFY | TCR sees TR2 Shield Door | OPEN |
| <input type="checkbox"/> | VERIFY | TCR sees TR2 Shield Door, Div A <input type="checkbox"/> , Div B <input type="checkbox"/> | NOT RESET |
| <input type="checkbox"/> | VERIFY | TCR sees all gates, Div A <input type="checkbox"/> , Div B <input type="checkbox"/> | SECURED |
| <input type="checkbox"/> | VERIFY | TCR sees Chipmunk 1, Div A <input type="checkbox"/> and Div B | O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees Chipmunk 2, Div A <input type="checkbox"/> and Div B | O.K. |
| | SET | Power Supply C below Setpoint | |
| <input type="checkbox"/> | VERIFY | TCR sees Div A RIS unit | O.K. |

<input type="checkbox"/>	SET	Power Supply E below Setpoint	
<input type="checkbox"/>	VERIFY	TCR sees Div B RIS unit	O.K.
<input type="checkbox"/>	INSERT	12MW040	
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B <input type="checkbox"/> 12MW040	INSERTED
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	O.K.
<input type="checkbox"/>	SATISFY	MP7 Existing interlocks	
<input type="checkbox"/>	VERIFY	TCR sees MP7 existing interlocks Div A <input type="checkbox"/> and Div B	O.K.
<input type="checkbox"/>	SATISFY	MP7 Existing interlocks	
<input type="checkbox"/>	VERIFY	TCR sees MP7 existing interlocks Div A <input type="checkbox"/> and Div B	O.K.
<input type="checkbox"/>	EXTRACT	MP7 beamstop	
<input type="checkbox"/>	VERIFY	TCR sees MP7 beamstop	EXTRACTED
<input type="checkbox"/>	EXTRACT	Any BP [# _____] in TR2	
<input type="checkbox"/>	VERIFY	TCR sees TR2 BPs , Div A <input type="checkbox"/> and Div B	EXTRACTED
<input type="checkbox"/>	VERIFY	TCR sees all gates , Div A <input type="checkbox"/> , Div B <input type="checkbox"/>	NOT SECURED
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	NOT O.K.
<input type="checkbox"/>	VERIFY	TCR sees MP7 beamstop	INSERTED
<input type="checkbox"/>	INSERT	BP # _____ in TR2	
<input type="checkbox"/>	VERIFY	TCR sees TR2 BPs , Div A <input type="checkbox"/> and Div B	INSERTED
<input type="checkbox"/>	VERIFY	TCR sees all gates , Div A <input type="checkbox"/> , Div B <input type="checkbox"/>	SECURED
<input type="checkbox"/>	EXTRACT	MP7 beamstop	
<input type="checkbox"/>	VERIFY	TCR sees MP7 beamstop	EXTRACTED
<input type="checkbox"/>	TRIP	Chipmunk 2	
<input type="checkbox"/>	VERIFY	TCR sees Chipmunk 1 , Div A <input type="checkbox"/> and Div B	NOT O.K.
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	NOT O.K.
<input type="checkbox"/>	VERIFY	TCR sees MP7 beamstop	INSERTED
<input type="checkbox"/>	RESET	Chipmunk 2	
<input type="checkbox"/>	VERIFY	TCR sees Chipmunk 1 , Div A <input type="checkbox"/> and Div B	O.K.
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	O.K.
<input type="checkbox"/>	EXTRACT	MP7 beamstop	
<input type="checkbox"/>	VERIFY	TCR sees MP7 beamstop	EXTRACTED
<input type="checkbox"/>	SET	Power Supply D above Setpoint	
<input type="checkbox"/>	VERIFY	TCR sees Div B RIS unit	NOT O.K.
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	NOT O.K.
<input type="checkbox"/>	VERIFY	TCR sees MP7 beamstop	INSERTED
<input type="checkbox"/>	SET	Power Supply D below Setpoint	
<input type="checkbox"/>	VERIFY	TCR sees Div A RIS unit	O.K.
<input type="checkbox"/>	VERIFY	TCR sees Div A <input type="checkbox"/> and Div B interlocks	O.K.

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|--------------------------|----------------|---|------------------|
| <input type="checkbox"/> | EXTRACT | MP7 beamstop | |
| <input type="checkbox"/> | VERIFY | TCR sees MP7 beamstop | EXTRACTED |
| <input type="checkbox"/> | EXTRACT | 12MW040 | |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B <input type="checkbox"/> 12MW040 | EXTRACTED |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B interlocks | NOT O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees MP7 beamstop | INSERTED |
| <input type="checkbox"/> | INSERT | 12MW040 | |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B <input type="checkbox"/> 12MW040 | INSERTED |
| <input type="checkbox"/> | EXTRACT | MP7 beamstop | |
| <input type="checkbox"/> | VERIFY | TCR sees MP7 beamstop | EXTRACTED |
| <input type="checkbox"/> | VIOLATE | MP7 existing interlocks | |
| <input type="checkbox"/> | VERIFY | TCR sees MP7 existing interlocks, Div A <input type="checkbox"/> and Div B <input type="checkbox"/> | NOT O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B interlocks | NOT O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees MP7 beamstop | INSERTED |
| <input type="checkbox"/> | SATISFY | MP7 Existing interlocks | |
| <input type="checkbox"/> | VERIFY | TCR sees MP7 existing interlocks Div A <input type="checkbox"/> and Div B | O.K. |
| <input type="checkbox"/> | VERIFY | TCR sees Div A <input type="checkbox"/> and Div B interlocks | O.K. |
- Check for acceptance of Rollup test of MP7**

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: ____/____/____

TTL: Sign for completion of final testing: _____

Date: ____/____/____